

REMARKS

Claims 1-11, 17-22 and 33-35 have been amended. Claims 1-36 remain pending in the application. Reconsideration is respectfully requested in light of the following remarks.

Section 112, Second Paragraph, Rejection:

The Examiner rejected claims 1-32 and 34-36 under 35 U.S.C. § 112, second paragraph, as indefinite for reciting the term “cache accumulator,” whereas the specification uses both the terms “cache accumulator” (in the summary and brief description of the drawings sections) and “cache accumulator memory” (in the detailed description of embodiments section).

In order to conform the claims to the portion of the specification in which embodiments are described in detail, Applicants have amended claims 1-11, 17-22 and 33-35 to replace instances of the term “cache accumulator” with the term “cache accumulator memory.” However, Applicants note that the two terms are used interchangeably in the specification, and further notes that this amendment is not intended to narrow or limit the scope of the claims in any way.

Applicants submit that the rejection of claims 1-32 and 34-36 under 35 U.S.C. § 112, second paragraph, has been overcome, and respectfully requests removal of the rejection.

Section 102(b) Rejection:

The Examiner rejected claims 1, 4-6, 9-12, 16, 20, 23, 26-27, 30, 33 and 34 under 35 U.S.C. § 102(b) as being anticipated by Fossum et al. (U.S. Patent 4,888,679) (hereinafter “Fossum”). Applicants respectfully traverse this rejection and submit that these claims are not anticipated by Fossum, as set forth in greater detail below.

With respect to claim 1, Fossum fails to teach or suggest all of the limitations recited in Applicants' claim. In particular, Fossum fails to teach or suggest any aspect of a cache accumulator memory interacting with an associativity list as recited in claim 1. That is, Fossum fails to teach or suggest a device that is configured as a cache of a memory, and that is also configured to accumulate an intermediate result of a block accumulation operation performed on a given block operand, wherein the intermediate result is both a result of and an operand of the block accumulation operation. Although Applicants feel these features of a cache accumulator memory are clear from the context of the specification and the exemplary embodiments described therein, for clarity Applicants have amended claim 1 to recite them explicitly.

As noted in the background section of Applicants' specification, accumulation operations pose a distinct set of challenges owing to the fact that an operand of the accumulation operation also serves as the result of the operation. Fossum discloses a cache 24 configured to service both a scalar processor 21 and a vector processor 22, but fails to disclose any aspect of accumulation operations or any specific problems presented by such operations. Fossum therefore does not disclose a cache accumulator as recited in Applicants' claim 1, and as such cannot be said to anticipate claim 1. Applicants note that the remaining cited art also fails to teach or suggest this limitation, either separately or in combination. Consequently, Applicants submit that claim 1 is patentably distinguishable over the cited art.

A similar argument applies to independent claims 20, 33 and 34, each of which recites limitations similar to claim 1. Thus, Applicants submit that each of these independent claims as well as those claims depending therefrom are therefore patentably distinguishable over the cited art.

Section 103(a) Rejection:

The Examiner rejected claims 2 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Fossum as applied to claim 1 above and further in view of McClure (U.S. Patent 5,590,307), claim 3 as being unpatentable over Fossum as applied to claim 1 above and further in view of Faraboschi et al. (U.S. Patent 6,122,708) (hereinafter "Faraboschi"), claims 7 and 8 as being unpatentable over Fossum as applied to claim 1 above and further in view of Handy ("The Cache Memory Book: The Authoritative Reference on Cache Design," Academic Press, 1993, page 57), claims 13, 14 and 15 as being unpatentable over Fossum as applied to claim 1 above and further in view of "Microsoft Computer Dictionary" (Microsoft Press, 2002, page 291: parity) (hereinafter "Microsoft"), and claims 17 and 18 as being unpatentable over Fossum as applied to claim 1 above and further in view of Morton (U.S. Patent 6,088,783).

The Examiner rejected claim 21 under 35 U.S.C. § 103(a) as being unpatentable over Fossum as applied to claim 20 above and further in view of McClure, claim 22 as being unpatentable over Fossum as applied to claim 1 above and further in view of Faraboschi, claims 24 and 25 as being unpatentable over Fossum as applied to claim 1 above and further in view of Handy, claims 28 and 29 as being unpatentable over Fossum as applied to claim 1 above and further in view of Microsoft, and claims 31 and 32 as being unpatentable over Fossum as applied to claim 20 above and further in view of Morton.

The Examiner rejected claims 35 and 36 under 35 U.S.C. § 103(a) as being unpatentable over Fossum as applied to claim 34 above in view of Morton and further in view of Microsoft.

Applicants respectfully traverse each of these rejections and note that the dependent claims recite further distinctions over the cited art. However, as each of these dependent claims has been shown above to be distinguishable by virtue of its dependence on a distinguishable independent claim, a further discussion of their distinctions is unnecessary at this time.

Information Disclosure Statement:

Applicants note that a second information disclosure statement was submitted electronically to the U.S. Patent Office on August 31, 2004. However, a signed and initialed copy of the electronic submission indicating consideration of the listed references was not included with the Office Action. Applicants request the Examiner to carefully consider the listed references and return a copy of the signed and initialed electronic submission from the August 31, 2004 statement, a copy of which is included herewith for the Examiner's convenience.

CONCLUSION

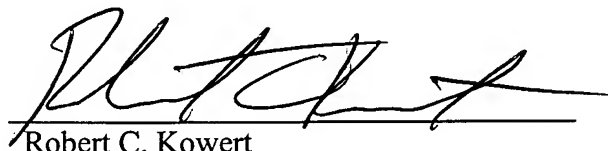
Applicants submit the application is in condition for allowance, and notice to that effect is respectfully requested.

If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above referenced application from becoming abandoned, Applicants hereby petition for such extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5681-05300/RCK.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☐ Petition for Extension of Time
- ☐ Notice of Change of Address
- ☒ Copy of electronic IDS previously submitted on August 31, 2004
- ☒ Information Disclosure Statement with accompanying Form PTO-1449 and references B1-B2

Respectfully submitted,



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